

PCT REQUEST

1/8

PU4962WO

Original (for SUBMISSION) - printed on 12.12.2003 08:34:49 AM

| | | |
|----------------|--|--|
| 0 | For receiving Office use only | |
| 0-1 | International Application No. | |
| 0-2 | International Filing Date | |
| 0-3 | Name of receiving Office and "PCT International Application" | |
| 0-4 | Form - PCT/RO/101 PCT Request | |
| 0-4-1 | Prepared using | PCT-EASY Version 2.92 (updated 01.11.2003) |
| 0-5 | Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty | |
| 0-6 | Receiving Office (specified by the applicant) | United States Patent and Trademark Office (USPTO) (RO/US) |
| 0-7 | Applicant's or agent's file reference | PU4962WO |
| I | Title of invention | CCR5 ANTAGONISTS AS THERAPEUTIC AGENTS |
| II | Applicant | |
| II-1 | This person is: | applicant only |
| II-2 | Applicant for | all designated States except US |
| II-4 | Name | SMITHKLINE BEECHAM CORPORATION |
| II-5 | Address: | One Franklin Plaza Philadelphia, PA PA United States of America |
| II-6 | State of nationality | US |
| II-7 | State of residence | US |
| II-8 | Telephone No. | 919-483-2370 |
| II-9 | Facsimile No. | 919-483-7988 |
| III-1 | Applicant and/or inventor | |
| III-1-1 | This person is: | applicant and inventor |
| III-1-2 | Applicant for | US only |
| III-1-4 | Name (LAST, First) | KAZMIERSKI, Wieslaw, Mieczyslaw |
| III-1-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-1-6 | State of nationality | US |
| III-1-7 | State of residence | US |

BEST AVAILABLE COPY

| | | |
|---------|----------------------------------|---|
| III-2 | Applicant and/or inventor | |
| III-2-1 | This person is: | applicant and inventor |
| III-2-2 | Applicant for | US only |
| III-2-4 | Name (LAST, First) | AQUINO, Christopher, Joseph |
| III-2-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-2-6 | State of nationality | US |
| III-2-7 | State of residence | US |
| III-3 | Applicant and/or inventor | |
| III-3-1 | This person is: | applicant and inventor |
| III-3-2 | Applicant for | US only |
| III-3-4 | Name (LAST, First) | BIFULCO, Neil |
| III-3-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-3-6 | State of nationality | US |
| III-3-7 | State of residence | US |
| III-4 | Applicant and/or inventor | |
| III-4-1 | This person is: | applicant and inventor |
| III-4-2 | Applicant for | US only |
| III-4-4 | Name (LAST, First) | BOROS, Eric, Eugene |
| III-4-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-4-6 | State of nationality | US |
| III-4-7 | State of residence | US |
| III-5 | Applicant and/or inventor | |
| III-5-1 | This person is: | applicant and inventor |
| III-5-2 | Applicant for | US only |
| III-5-4 | Name (LAST, First) | CHAUDER, Brian, Andrew |
| III-5-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-5-6 | State of nationality | CA |
| III-5-7 | State of residence | US |

| | | |
|---------|----------------------------------|---|
| III-6 | Applicant and/or inventor | |
| III-6-1 | This person is: | applicant and inventor |
| III-6-2 | Applicant for | US only |
| III-6-4 | Name (LAST, First) | CHONG, Pek, Yoke |
| III-6-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-6-6 | State of nationality | MY |
| III-6-7 | State of residence | US |
| III-7 | Applicant and/or inventor | |
| III-7-1 | This person is: | applicant and inventor |
| III-7-2 | Applicant for | US only |
| III-7-4 | Name (LAST, First) | DUAN, Maosheng |
| III-7-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-7-6 | State of nationality | CN |
| III-7-7 | State of residence | US |
| III-8 | Applicant and/or inventor | |
| III-8-1 | This person is: | applicant and inventor |
| III-8-2 | Applicant for | US only |
| III-8-4 | Name (LAST, First) | DEANDA, JR., Felix |
| III-8-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-8-6 | State of nationality | US |
| III-8-7 | State of residence | US |
| III-9 | Applicant and/or inventor | |
| III-9-1 | This person is: | applicant and inventor |
| III-9-2 | Applicant for | US only |
| III-9-4 | Name (LAST, First) | KOBLE, Cecilia, Suarez |
| III-9-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-9-6 | State of nationality | VE |
| III-9-7 | State of residence | US |

| | | |
|---------------|----------------------------------|---|
| III-10 | Applicant and/or inventor | |
| III-10-1 | This person is: | applicant and inventor |
| III-10-2 | Applicant for | US only |
| III-10-4 | Name (LAST, First) | MCLEAN, Ed, Williams |
| III-10-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-10-6 | State of nationality | US |
| III-10-7 | State of residence | US |
| III-11 | Applicant and/or inventor | |
| III-11-1 | This person is: | applicant and inventor |
| III-11-2 | Applicant for | US only |
| III-11-4 | Name (LAST, First) | PECKHAM, Jennifer, Poole |
| III-11-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-11-6 | State of nationality | US |
| III-11-7 | State of residence | US |
| III-12 | Applicant and/or inventor | |
| III-12-1 | This person is: | applicant and inventor |
| III-12-2 | Applicant for | US only |
| III-12-4 | Name (LAST, First) | PERKINS, Angilique, C |
| III-12-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-12-6 | State of nationality | US |
| III-12-7 | State of residence | US |
| III-13 | Applicant and/or inventor | |
| III-13-1 | This person is: | applicant and inventor |
| III-13-2 | Applicant for | US only |
| III-13-4 | Name (LAST, First) | THOMPSON, James, Benjamin |
| III-13-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-13-6 | State of nationality | US |
| III-13-7 | State of residence | US |

| | | |
|-----------------|---|--|
| III-14 | Applicant and/or inventor | |
| III-14-1 | This person is: | applicant and inventor |
| III-14-2 | Applicant for | US only |
| III-14-4 | Name (LAST, First) | VANDERWALL, Dana |
| III-14-5 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| III-14-6 | State of nationality | US |
| III-14-7 | State of residence | US |
| IV-1 | Agent or common representative; or address for correspondence The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: | agent |
| IV-1-1 | Name (LAST, First) | LEVY, David, J |
| IV-1-2 | Address: | GlaxoSmithKline Five Moore Drive PO Box 13398 Research Triangle Park, NC 27709 United States of America |
| IV-1-3 | Telephone No. | 919-483-2370 |
| IV-1-4 | Facsimile No. | 919-483-7988 |
| IV-2 | Additional agent(s) | additional agent(s) with same address as first named agent |
| IV-2-1 | Name(s) | DEPPENBROCK, Bonnie, L |
| V | Designation of States | |
| V-1 | Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned) | AP: BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW and any other State which is a Contracting State of the Harare Protocol and of the PCT EA: AM AZ BY KG KZ MD RU TJ TM and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT EP: AT BE BG CH&LI CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR and any other State which is a Contracting State of the European Patent Convention and of the PCT OA: BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG and any other State which is a member State of OAPI and a Contracting State of the PCT |

| | | | |
|--------|---|--|--|
| V-2 | National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned) | AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH&LI CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW | |
| V-5 | Precautionary Designation Statement In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. | | |
| V-6 | Exclusion(s) from precautionary designations | NONE | |
| VI-1 | Priority claim of earlier national application | | |
| VI-1-1 | Filing date | 13 December 2002 (13.12.2002) | |
| VI-1-2 | Number | 60/433,634 | |
| VI-1-3 | Country | US | |
| VI-2 | Priority document request The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s): | VI-1 | |
| VII-1 | International Searching Authority Chosen | European Patent Office (EPO) (ISA/EP) | |
| VIII | Declarations | Number of declarations | |
| VIII-1 | Declaration as to the identity of the inventor | - | |
| VIII-2 | Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent | - | |
| VIII-3 | Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application | - | |
| VIII-4 | Declaration of inventorship (only for the purposes of the designation of the United States of America) | - | |
| VIII-5 | Declaration as to non-prejudicial disclosures or exceptions to lack of novelty | - | |

PCT REQUEST

7/8

PU4962WO

Original (for SUBMISSION) - printed on 12.12.2003 08:34:49 AM

| IX | Check list | number of sheets | electronic file(s) attached |
|-------|---|---|-----------------------------|
| IX-1 | Request (including declaration sheets) | 8 | - |
| IX-2 | Description | 813 | - |
| IX-3 | Claims | 45 | - |
| IX-4 | Abstract | 1 | EZABST00.TXT |
| IX-5 | Drawings | 0 | - |
| IX-7 | TOTAL | 867 | |
| | Accompanying items | paper document(s) attached | electronic file(s) attached |
| IX-8 | Fee calculation sheet | ✓ | - |
| IX-11 | Copy of general power of attorney | reference no. SB CORP | - |
| IX-12 | Statement explaining lack of signature | ✓ | - |
| IX-17 | PCT-EASY diskette | - | Diskette |
| IX-18 | Other (specified): | POA authorizing D. Levy signature for SB Corp | - |
| IX-19 | Figure of the drawings which should accompany the abstract | | |
| IX-20 | Language of filing of the international application | English | |
| X-1 | Signature of applicant, agent or common representative | <i>Bonnie L. Deppenbrock</i> | |
| X-1-1 | Name (LAST, First) | DEPPENBROCK, Bonnie, L | |
| X-2 | Signature of applicant, agent or common representative | | |
| X-2-1 | Name (LAST, First) | LEVY, David, J | |

FOR RECEIVING OFFICE USE ONLY

| | | |
|--------|--|--------|
| 10-1 | Date of actual receipt of the purported international application | |
| 10-2 | Drawings: | |
| 10-2-1 | Received | |
| 10-2-2 | Not received | |
| 10-3 | Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application | |
| 10-4 | Date of timely receipt of the required corrections under PCT Article 11(2) | |
| 10-5 | International Searching Authority | ISA/EP |
| 10-6 | Transmittal of search copy delayed until search fee is paid | |

PCT REQUEST

8/8

PU4962WO

Original (for SUBMISSION) - printed on 12.12.2003 08:34:49 AM

FOR INTERNATIONAL BUREAU USE ONLY

| | | |
|------|---|--|
| 11-1 | Date of receipt of the record copy by the International Bureau | |
|------|---|--|

PCT (ANNEX - FEE CALCULATION SHEET)

1/2

PU4962WO

Original (for SUBMISSION) - printed on 12.12.2003 08:34:49 AM

(This sheet is not part of and does not count as a sheet of the international application)

| | | |
|---------|--|--|
| 0 | For receiving Office use only | |
| 0-1 | International Application No. | |
| 0-2 | Date stamp of the receiving Office | |
| 0-4 | Form - PCT/RO/101 (Annex) PCT Fee Calculation Sheet Prepared using | PCT-EASY Version 2.92 (updated 01.11.2003) |
| 0-9 | Applicant's or agent's file reference | PU4962WO |
| 2 | Applicant | SMITHKLINE BEECHAM CORPORATION, et al. |
| 12 | Calculation of prescribed fees | fee amount/multiplier Total amounts (USD) |
| 12-1 | Transmittal fee T ⇔ | 240 |
| 12-2-1 | Search fee S ⇔ | 1,119 |
| 12-2-2 | International search to be carried out by | EP |
| 12-3 | International fee | |
| | Basic fee (first 30 sheets) b1 476 | |
| 12-4 | Remaining sheets 837 | |
| 12-5 | Additional amount (X) 12 | |
| 12-6 | Total additional amount b2 10,044 | |
| 12-7 | b1 + b2 = B 10,520 | |
| 12-8 | Designation fees | |
| | Number of designations contained in international application 99 | |
| 12-9 | Number of designation fees payable (maximum 5) 5 | |
| 12-10 | Amount of designation fee (X) 104 | |
| 12-11 | Total designation fees D 520 | |
| 12-12 | PCT-EASY fee reduction R -148 | |
| 12-13 | Total International fee (B+D-R) I ⇔ | 10,892 |
| 12-14 | Fee for priority document | |
| | Number of priority documents requested 1 | |
| 12-15 | Fee per document (X) 20 | |
| 12-16 | Total priority document fee P ⇔ | 20 |
| 12-17 | TOTAL FEES PAYABLE (T+S+I+P) ⇔ | 12,271 |
| 12-19 | Mode of payment | authorization to charge deposit account |
| 12-20 | Deposit account instructions The receiving Office: | United States Patent and Trademark Office (USPTO) (RO/US) |
| 12-20-1 | Authorization to charge the total fees indicated above. | ✓ |

PCT (ANNEX - FEE CALCULATION SHEET)

2/2

PU4962WO

Original (for SUBMISSION) - printed on 12.12.2003 08:34:49 AM

| | | |
|---------|---|--|
| 12-20-2 | Authorization to charge any deficiency or credit any overpayment in the total fees indicated above. | ✓ |
| 12-20-3 | Authorization to charge the fee for priority document. | ✓ |
| 12-21 | Deposit account No. | 07-1392 |
| 12-22 | Date | 12 December 2003 (12.12.2003) |
| 12-23 | Name and signature | DEPPENBROCK, Bonnie, L <i>Bonnie L. Heppenbrock</i> |

VALIDATION LOG AND REMARKS

| | | |
|--------|---------------------------------|---|
| 13-2-7 | Validation messages Contents | Green? The international application contains no drawings. Please verify. |
| 13-2-9 | Validation messages Payment | Green? Please ensure that you have a valid deposit account with the receiving Office selected. |

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.